The Report Committee for Abby Pauline Bailin
Certifies that this is the approved version of the following report:

Clinical supervision of mental health professionals serving youth: Format, function, and psychotherapeutic content

APPROVED BY
SUPERVISING COMMITTEE:

Supervisor:

Sarah Kate Bearman

Cindy Carlson

Clinical supervision of mental health professionals serving youth: Format, function, and psychotherapeutic content

by

Abby Pauline Bailin, BA

Report

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Arts

The University of Texas at Austin

May 2017

Acknowledgements

I would like to thank those who have provided me with support and guidance throughout my completion of my graduate schooling to date. First and foremost, I would like to thank Dr. Sarah Kate Bearman, who has guided me through her careful mentorship to help me develop as an independent researcher. Dr. Bearman – you have taught me that passion and work can go hand in hand, and you have challenged my way of thinking every day since I met you. I am so grateful for your mentorship over the last five years, and I feel honored that I get to continue to develop as an independent researcher under your mentorship in the coming years. I would also like to thank all of my colleagues in the LEAP Lab, who have provided support through this process. In particular, I want to thank Rafaella Sale for helping to conduct this study, and acting as my co-coder for all observational coding data. Lastly, I would like to thank my family, who has provided unconditional support throughout the process.

Abstract

Clinical supervision of mental health professionals serving youth: Format, function, and psychotherapeutic content

Abby Pauline Bailin, M.A.

The University of Texas at Austin, 2017

Supervisor: Sarah Kate Bearman

Clinical supervision is a key training tool for mental health professionals in routine community care settings serving children; however, there is limited scientific evaluation of the specific ingredients that comprise supervision, particularly outside the context of clinical efficacy and effectiveness trials. This study examines the format, function, micro skills, and psychotherapeutic content of routine supervision. Supervisors (n = 13) and supervisees (n = 20) reported on 100 supervision sessions, and a subset of audio recorded sessions (n = 57) was assessed with observational coding. Results indicated supervisory strategies utilized in research trials shown to enhance supervisee competency were largely absent from routine supervision (e.g., role play, corrective feedback), and were delivered with insufficient competency (e.g., live modeling). Brief discussion of evidence-based therapeutic content for common youth disorders was

present across sessions; however, discussion of some core evidence-based elements was largely absent (i.e., exposure for anxiety and behavioral activation for depression).

Table of Contents

List of Tables

List of Figures

Introduction

Clinical supervision (hereafter, "supervision") is a primary method through which psychologists and other mental health professionals learn psychotherapeutic practice (Lambert & Ogles, 1997), and is therefore a critical component in the training and regulation of therapists (Holloway & Neufeldt, 1995). In a large national survey of community-based mental health clinics that serve children and families, 90% of clinic directors reported that clinicians received weekly supervision (Schoenwald et al., 2008). Evidence suggests that supervision is an effective training strategy for mental health clinicians (Sholomskas et al., 2005), and that it has the potential to increase clinician competency in delivering interventions that have demonstrated clinical benefit (evidence-based practices) (Bearman, Schneiderman, & Zoloth, 2016; Schoenwald, Sheidow, & Chapman, 2009). Despite its ubiquity and proposed utility, supervision is vastly understudied. In particular, little is known about how supervision is typically practiced, and how these practices compare to supervision in rigorous research trials.

Clinical Supervision in Mental Health Services

Supervision within the mental health context is a relationship whereby clinicians receive ongoing clinical support as part of their work in an agency or clinic (Schoenwald et al., 2008). Various other terms have been used to describe supervision, including mental health consultation, coaching, or technical assistance, typically depending upon the professional relationship of the supervisor and supervisee, and the supervisor's relationship to the employing agency (Bearman et al., 2016). The term "supervision" will be used throughout for simplicity.

Supervision may be understood as a formal provision that manages, supports, develops, and evaluates the work of mental health professionals (Milne, 2009). Milne (2009) delineated the function of supervision into three components: normative, restorative, and formative. Normative goals include case management and quality control issues to ensure safe and effective delivery of

psychotherapy to protect the client. Restorative goals focus on emotional support and processing to develop the supervisee's professional identity and resilience. Lastly, formative goals aim to develop the supervisee's clinical skills and knowledge, also described as clinical competency.

Recently, mental health licensing bodies have set forth explicit guidelines regarding supervision in response to increasing demands to evaluate the competency, or skillfulness, of mental health professionals. These guidelines also recognize the practice of supervision itself as a core competency for mental health professionals. The American Psychological Association issued Guidelines for Clinical Supervision in Health Service Psychology (2015) in order to outline standards for quality supervision, and to inform training and education in the implementation of competency-based supervision. Competency-based supervision identifies the specific knowledge, skills, attitudes, and values that form foundational and advanced professional competencies in measurable terms for both supervisors and supervisees (Falender & Shafranske, 2007). These APA standards were preceded by supervision guidelines in other disciplines, including the Association for Counselor Education and Supervision (Borders et al., 2011), the American Association for Marriage and Family Therapy (2007), and the National Association of Social Work Boards (2009). These guidelines highlight the pedagogical shift in mental health to focus on measuring trainee learning outcomes, articulated as competencies (Nelson, 2007), and recognition that supervision is a cornerstone for the preparation of health service psychologists that develops these competencies (Falender et al., 2004).

The emphasis on supervision as a robust training tool is also articulated in licensing requirements across numerous professional mental health disciplines in which supervision is a prerequisite for state licensure and independent practice. Clinicians working to become a Licensed Master Social Worker (LMSW), Licensed Clinical Social Worker (LCSW), Licensed Marriage and Family Therapist (LMFT), and Licensed Professional Counselor (LPC) must accrue approximately 3,000 hours of supervised therapy, with 100 to 200 hours of individual and

group supervision to accompany these clinical hours (Counselor Licensure Requirements in Texas; Social Work Licensure Requirements; Texas State Board of Examiners). Licensed doctoral-level psychologists are required anywhere from 3,000 to 6,000 supervised hours of clinical practice depending on state of licensure (Dittman, 2004). In addition to the significant time dedicated to supervision in graduate and postgraduate training, there may be significant financial costs associated with this training. A review of licensing board information websites in Texas (How much does LCSW supervision cost, 2014; Shuttle, 2009), indicates that if supervisees do not receive supervision as a part of their pre-licensure job, they must pay for their own supervision, ranging in price from $100 to $300 a session for individual supervision. Therefore, supervision is a significant time and economic investment with implications for newly minted mental health providers, as well as for their clients. Supervision as a means of promoting effective mental health treatment has particular importance in the context of research that indicates overall poor outcomes for youth mental health services, discussed next.

Mental Health Services often Fail to Improve Youth Outcomes

Outpatient mental health service centers account for 57% of expenditures to treat children and adolescents with mental health disorders (Ringel & Sturm, 2001). Results of services research are largely discouraging, with average clinical effects sizes for treatment as it is typically provided ("usual care") across clients hovering around zero (e.g., Bickman, Lambert, Andrade, & Penaloza, 2000; Bickman, Noser, & Summerfelt, 1999; Weisz, Jensen-Doss, Hawley, 2006). Additionally, estimates of treatment failure, measured as increased symptom severity over the course of treatment, is rated as high as 21% for youth served in traditional community mental health settings (Warren, Nelson, & Burlingame, 2009). The failure of usual care to produce significant treatment effects for children may be explained, in part, by research that indicates that therapists in these settings tend to use fewer practice elements derived from research-supported protocols (Weisz et al., 2009), or deliver these practice elements with limited

competency (Garland et al., 2014; Southam-Gerow et al., 2010). In an evaluation of usual care using observational coding in community mental health clinics, key elements of evidence-based practice were absent from treatment for specific problem areas (Bailin, Sale, & Bearman, 2015). For example, use of exposure was completely absent in the treatment of anxiety and trauma, and behavioral parent management strategies (i.e., praise, effective instructions, and time out from positive reinforcement) for the treatment of disruptive behavior disorders were rarely delivered, and when they were, therapists delivered these strategies with low levels of clinical competency.

These results point to the need for enhanced training that develops therapist competency in delivery of effective psychotherapy strategies with youth clients. Because supervision is proposed to be a powerful contributor to training, and the most widely used, effective, and efficient means of advancing therapist expertise (Gonzalvez & Milne, 2010), it may be a mechanism to enhance psychotherapeutic practices to ultimately improve child outcomes in community service settings. To date, the bulk of research on effective mental health treatment has focused on the interventions themselves, and not on the means by which therapists learn to adequately deliver these interventions in real-world settings.

Empirical Research on Clinical Supervision

Clinical supervision has been called the "least investigated" aspect of clinical training and education (Kilminster & Jolly, 2000, p. 827). In general, research in supervision has focused on restorative goals, namely the relationship factors between supervisees and supervisors without examining supervisor and supervisee behaviors, or clinical outcomes. As an example of this, in a systematic review of published studies about the impact of supervision from 1980 to 2002, 368 of 448 identified published papers on supervision were purely theoretical or descriptive (Wheeler & Richards, 2007). Only 18 studies were identified that used valid and reliable measurement instruments to quantify the impact of supervision on the supervisee, or used some other methodologically rigorous analysis of the impact. Likewise, a review by Watkins (2011) of

papers published on the topic of client outcomes related to supervision between 1981 and 2011 noted a research agenda devoted to factors of supervisory alliance, rather than client outcomes (normative goals) or content and strategy specific variables in supervision (formative goals).

The small literature that does actually examine client outcomes is fraught with methodological flaws including inadequate sample sizes (i.e., Couchon & Bernard, 1984), lack of randomization procedures to conditions (i.e., Kivlighan, Angelone, & Swafford, 1991), and lack of objective measures with heavy reliance on self-report data (i.e., Vallance, 2004). Such limitations make it difficult to identify particular aspects of supervision that comprise best practices, influence therapist behavior, and improve client outcomes (Watkins, 2014).

Impact of Supervision on Supervisee Behavior Change

The focus on restorative (relationship) and normative (client safety) functions of supervision has perhaps neglected an essential precursor to client outcomes; that is, the development of therapist skills, described as the formative function (Reiser & Milne, 2014). Reiser and Milne (2014) argued that while client outcomes are a necessary element within a comprehensive evaluation of supervision, there are significant reasons to question that it represents a definitive demonstration of effective supervision. Specifically, they note that change in the supervisee must be prioritized to ensure client protection, and should perhaps be the outcome of interest.

Given that supervision is a training requirement and conducted for the benefit of supervisees as well as clients (Freitas, 2002), there is reason to examine the micro skills of clinical supervision, or the moment-to-moment activities that supervisors use to promote learning and supervisee competence (James, Milne, & Morse, 2008). Supervisory micro skills are still left un-operationalized (Falender & Shafranske, 2012), and there is little agreement about how to define the specific content of supervision (Carroll, 1988; Storm, Todd, Sprenkle, & Morgan,

2001). These micro skills may provide insight into the means through which supervisees learn and change behaviors via supervision. Research indicates that one-time workshops in psychosocial interventions influence therapist knowledge and attitudes about evidence-based practices, but are ineffective in influencing therapist behavior (Beidas & Kendall, 2010). Supervision, in contrast, has been shown to be a critical complement to one-time workshops to support the ongoing training of clinicians (Bearman et al., 2016; Rakovshik & McManus, 2010). Therefore, understanding the mechanisms that support this behavior change is critical for effective psychotherapy training.

One practical starting place for identifying components of supervision that influence supervisee behavior change may be the randomized clinical trials (RCTs) of psychotherapy interventions deemed highly effective within the treatment evidence base. Because RCTs seek to test the efficacy of particular interventions, great care is given to ensuring that the therapists delivering those interventions are highly competent. Examining the micro skills used in supervision within RCTs may provide an indicator of the necessary components that influence therapist behavior, therapist competency, and positive client outcomes. Ongoing, intensive clinical supervision is a common feature of treatment efficacy trials in order to ensure internal validity of the experiment. Roth, Piling, and Turner (2010) reviewed 27 "exemplary" treatment trials that had significant impact in research and clinical practice. They found that almost all therapist participants received regular "model-specific" supervision that focused on the specific therapeutic content of the intervention being tested, and that therapy sessions were recorded and reviewed for therapist competence. The positive client outcomes reported in these rigorous trials cannot be interpreted as resulting from the intervention alone, but rather as a treatment package that includes ongoing, model-specific supervision with corrective feedback (Roth et al., 2010).

Treatment effectiveness trials, in which evidence-based treatments are tested under real world conditions (i.e., existing clinicians, clients, and setting) to reflect the routine care context, also provide useful data on the ways that supervision micro skills and therapeutic content impact supervisee behavior and client outcomes. Data from a large-scale effectiveness trial of an empirically supported treatment, multisystemic therapy (MST) for youth with antisocial behavior, indicated that supervisor focus on supervisee adherence to the intervention and treatment principles predicted greater therapist adherence in session and better youth outcomes (Schoenwald et al., 2009). The highly structured supervision of MST included a model-specific focus with great emphasis given to the therapeutic content of the intervention, along with regular corrective feedback regarding therapist adherence to MST assessed from recorded therapy sessions (Hengeller, Schoenwald, Liao, Letourneau, & Edwards, 2002). Similarly, in an effectiveness trial of evidence-based protocols for youth with depression, anxiety, and disruptive behavior disorders, supervision that included active learning strategies, including supervisor modeling of practices and supervisor-enacted role-plays, predicted competent implementation, whereas discussion of practices without these micro skills in supervision did not (Bearman et al., 2013). These findings align with studies of therapist training in CBT that indicate that active learning strategies, such as role-play, modeling, and reflective practice, are most effective in enhancing procedural knowledge, or the skills and behaviors in action (Bearman et al., 2016; Bennett-Levy, McManus, Westling, & Fennell, 2014).

Findings from effectiveness studies also provide evidence for the impact of various therapist characteristics on therapy practice. Whereas therapists in efficacy trials are typically experienced, highly-trained therapists who receive expert supervision and immediate feedback from the treatment developer (Weisz & Gray, 2008), real world clinicians implementing treatment in effectiveness trials vary more with regard to professional degree and discipline,

therapeutic orientation, and attitudes towards evidence-based practices (Glisson et al., 2008). Such differences in therapist characteristics have been associated with knowledge of evidence-based practice (Aschraft et al., 2011) and evidence-based practice use in therapy (Brookman-Frazee, Haine, Baker-Ericzen, Zoffness, & Garland, 2010; Kolko, Cohen, Mannarino, Baumann, & Knudsen, 2009). The impact of therapist characteristics on practices has not been extended to the examination of supervisor characteristics and its impact on the therapeutic content and micro skills utilized in supervision, but may show similar patterns.

Taken together, a review of psychosocial treatments tested and shown to have positive client outcomes in both laboratory and real world settings reveals that a core feature of these evidence-based interventions is the delivery of supervision. In these trials, supervision is ongoing, and focused on therapeutic content specific to the intervention being tested. Additionally, therapist competency delivering these interventions is often reviewed with the use of recordings from which therapists receive corrective feedback. Supervisors engage in active learning strategies with their supervisees, such as role-play and modeling, in order to impact growth in procedural knowledge to ensure competent delivery of these strategies in future therapy sessions. These features of supervision may be understood as "evidence-based supervision strategies" that enhance therapist competency in delivering the intended intervention, while the impact of supervisor characteristics still remains in question.

Supervision in Routine Care

The empirical literature on clinical supervision for youth mental health has taken place almost exclusively within the context of clinical efficacy and effectiveness trials in which supervision is highly structured, evaluated, and delivered under strict conditions. Data from these clinical trials indicate how efficacious treatments may be implemented with integrity to the treatment protocol. However, in discussing children's mental health care, Hoagwood and Kolko

(2009) argue that "It is difficult and perhaps foolhardy to try to improve what you do not understand" and caution that implementation efforts without a rigorous understanding of the contexts of typical service delivery is "impractical, inefficient, and costly" (p. 35). In response, increasing efforts to measure care within routine community practice settings, termed practice-based evidence, aim to characterize current practices outside of research studies (Margison et al., 2000). The attention paid to practice-based evidence has resulted in a number of research studies devoted to the evaluation of therapeutic process elements within usual care (i.e., Chorpita et al., 2013; Garland et al., 2010). A thorough understanding of the community services context allows for the identification and potential manipulation of factors that influence treatment use and client outcomes to ultimately inform quality improvement efforts. Affecting change in the status quo cannot be achieved without in-depth exploration of current practices.

Despite the relevance of practice-based evidence, descriptions of typical practices in supervision, heron referred to as "supervision as usual," have been almost entirely absent from the literature. Research on supervision as usual is critical because community-based care is one of the primary contexts providing service to at-risk youth (Ringel & Sturm, 2001), and mental health trainees across disciplines receive practicum or internship training in these settings (Accurso, Taylor, & Garland, 2011). Additionally, within these settings, therapists typically provide services unobserved and with considerable autonomy (Hoge et al., 2011), so supervision may have particular relevance in the development of formative, normative, and restorative goals.

We were only able to locate one research study to date that has systematically assessed the format, function, and content of supervision as usual for youth mental health. Self-report data from 12 supervisor/supervisee dyads treating youth with disruptive behavior disorders within community-based mental health clinics indicated that supervision consisted largely of case conceptualization and discussion of therapy interventions, and that coverage of evidence-based practice elements was described as "brief." Observation of therapy sessions via session recording

review or live supervision was extremely rare. This aligns with a survey of California community-based clinic program managers who reported that supervision frequently relies on verbal discussion of case progress and possible clinical approaches to take, rather than live or recorded observation of therapist practices (Hurlburt et al., 2002). In contrast, in a national survey study of 200 community-based child mental health clinics, directors reported regular use of live observation of sessions (58%), as well as more frequent use of videotape (26%) and audiotape (18%) (Schoenwald et al., 2008). Therefore, the limited research on supervision as usual varies in terms of the quantity and quality of supervision reported (Bearman et al., 2013).

Research Aims

Research that evaluates the ingredients of practice-based supervision, or supervision as usual, is needed (Schoenwald, Mehta, Grazier, & Shernoff, 2013), and careful identification and clearer definition of supervision as usual for youth mental health could identify the overlaps and discrepancies with supervision utilized in research trials. The current study examined supervision as usual provided to child-focused therapists. It describes the format and function (i.e., normative, formative, restorative) of supervision sessions, as well as the supervisor-enacted micro skills within each function. It aims to extend the findings of Accurso and colleagues (2011) by characterizing the extent of discussion of evidence-based practice elements for common youth disorders beyond only disruptive behavior disorders, and by expanding the exploration to include not only evidence-based practice elements, but other therapeutic content items. In addition to these descriptive goals, the study will also explore whether supervisor characteristics predict the use of evidence-based supervision strategies. The study seeks to address some of the methodological flaws that are problematic in the supervision literature (Wheeler & Richards, 2007) by utilizing observational coding data to supplement self-report data from supervisor/supervisee dyads. Additionally, this research will extend the limited literature on

supervision outside of the context of clinical efficacy and effectiveness trials. Results may be used to identify potential quality improvement targets in routine care for youth mental health.

Methods

Participants

Dyads/Triads. Existing dyadic or triadic supervisory systems enrolled in the study together. There were 19 (95%) dyads comprised of one supervisor and one supervisee. There was one (5.0%) triad comprised of one supervisor and two supervisees. Supervisees in the triad completed their own set of baseline and weekly assessment measures, and 5 audio recordings were collected with the triad participating together. Therefore, the triad was treated as two dyads for the purposes of self-report data analysis, and as a single triadic unit for the purposes of observational coding analysis.

Supervisors. The sample included supervisors (n = 13) providing supervision to child-focused therapists. The mean age of supervisors was 41 years (SD = 9.31) and 12 were female (92.3%). All supervisors reported that they were Caucasian (100%), and one supervisor (8%) also identified as Hispanic. Six (46%) of the supervisors had a master's degree in Marriage and Family Therapy/Counseling, four (31%) had a doctoral degree in Psychology, and three (23%) had a master's degree in Social Work. Supervisors reported an average of 6.65 years of graduate training after undergraduate coursework (SD = 3.67), and an average of 11.25 years of clinical experience post-training (SD = 9.49). On average, supervisors reported providing 3.15 hours of individual supervision each week (SD = 1.68) and 0.92 hours of group supervision on a weekly basis (SD = 0.86). Primary theoretical orientation included psychodynamic (n = 1, 7.7%), cognitive or cognitive-behavioral (n = 5, 38.5%), family systems (n = 3, 23.1%), and other/integrated (n = 4, 30.8%). Characteristics of participants are described in Table 1 (Appendix A).

Supervisees. The sample included 21 supervisees who responded to recruitment seeking primarily child-focused therapists. One therapist was removed from all analyses due to self-report that the supervisee only provided services for adult clients; therefore, there are 20

supervisees in the sample. Participants were largely female (95%), Caucasian (85%), and state licensed in their professional discipline (85%) (refer to Table 1 in appendix A). The mean age of supervisees was 29.5 years (SD = 4.74), and most supervisees (90%) considered themselves primarily child-adolescent therapists. Supervisees reported an average caseload of 12.68 (*SD* = 36.56), and an average of 1.5 years of experience beyond graduate training (*SD* = 1.45). They reported receiving an average of 1.0 hour of individual supervision on a weekly basis (*SD* = 0.49), and an average of 0.73 hours of weekly group supervision (*SD* = 0.80). Primary theoretical orientation included psychodynamic (*n* = 1, 5.0%), cognitive, behavioral, or cognitive-behavioral (*n* = 8, 40.0%), family systems (*n* = 6, 30.0%), and other/integrated (*n* = 5, 25.0%).

Procedures

This study examined supervision practices in community-based outpatient child mental health in Central Texas using observational coding of recorded supervision sessions and self-report surveys from supervisors and supervisees. Recruitment efforts sought pre-existing supervisory dyads/triads within the community, with both supervisors and supervisees interested in participation. Recruitment took place through direct visits and presentations at community-mental health clinics, emails to child therapist listserves in the area, and direct contact through referrals. Potential participants were informed that the purpose of the study was to learn about current practices in clinical supervision for youth mental health. They were informed that their participation would entail the completion of baseline measures, audio recording (recorder provided by research team) of three to five consecutive supervision meetings, and completion of online measures following each recorded meeting. Upon written correspondence regarding interest in participation, research personnel obtained written consent from supervisory dyads/triads at locations convenient to study participants.

Once consent was obtained, participants completed baseline assessments using a web-based survey program "Qualtrics." The secure, online program was utilized for all survey

administrations to support secure and efficient data collection. Participants were compensated for the completion of each set of measures. Dyads/triads recorded five consecutive supervision meetings from start to finish. Recordings were transferred to a research lab and uploaded onto a secure server for coding purposes. Participants received emails immediately following each scheduled supervision meeting. The emails included a link to the weekly survey and instructions to complete it within 24 hours of the meeting. If the survey was not completed within 24 hours, research personnel sent email reminders directly from the software program to remind participants to complete their assessments. Data (audio recordings and surveys) were collected for 100 total supervision sessions. A subset of audio recorded sessions (57%) was randomly selected for observational coding.

Measures

Therapist Background Questionnaire. This 22-item self-report measure assessed at baseline collects information on the participant's age, gender, ethnicity, education, professional specialty as well as clinical experience, including typical caseload and theoretical orientation.

Evidence-Based Practice Attitudes Scale-50 Item (EBPAS-50; Aarons, Cafri, Lugo, & Sawitzky, 2012). This self-report measure assesses mental health provider attitudes towards adopting evidence-based practices. It consists of 50 items measured on a 5-point Likert scale ranging from 0 (*Not at all*) to 4 (*To a very great extent*). The extent to which they agree with statements with higher scores indicates more favorable attitudes (23 items are reverse coded). It comprises 12 subscales: appeal, requirements, openness, divergence, limitations, fit, monitoring, balance, burden, job security, organizational support, and feedback, and includes a total score on overall attitudes. The subscales have demonstrated acceptable to excellent internal consistency in a sample of community-based providers ($.70 < \alpha < .92$; Aarons et al., 2012). In the current study, internal consistency ($.67 \leq \alpha \leq .74$) was acceptable across all subscales.

Supervision Process Questionnaire (SPQ). This self-report measure prompts the respondent to answer questions about the most recent supervision session (Accurso et al., 2011). The original measure assessed total duration of the supervision session, session format (i.e., in person, live, individual); session data source (i.e., progress notes, videotape, audiotape, therapy checklist), and the function of the sessions, including crisis assessment, administrative tasks, case management issues, case conceptualization/formulation, therapy interventions/approaches, client relationship/alliance, supervisory relationship, and supervisee's professional/academic roles. Participants indicate the number of minutes spent on each function, and report if the amount of time devoted to each is "too little," "about right," or "too much." The questionnaire was expanded in the current study to assess information about the clients discussed in supervision, including number of clients discussed, type of clients that were the focus (i.e., all child, all adult, equal parts child and adult), and the primary concerns of clients (i.e., depression, anxiety, disruptive conduct, trauma, substance abuse, relationship problems, family conflict). In the study by Accurso and colleagues (2011), interrater reliability between supervisors and supervisees regarding time devoted to each supervisory function ranged from fair to good ($.40 < ICC < .72$; Cicchetti, 1994). In the current study, ICC coefficients between supervisors and supervisees ranged from .37 to .75 indicating poor to good reliability (Cicchetti, 1994).

Treatment Strategy Questionnaire (TSQ). The original version of this self-report measure assessed the extent to which the supervision session addressed therapeutic practices that have been identified as common evidence-based practice elements for children with disruptive behavior problems (i.e., delivering positive reinforcement, affect education, and psychoeducation) (Accurso et al., 2011). Respondents rate the extent to which the strategies were discussed in their most recent supervision session: *1 = not at all, 2 = very briefly, 3 = somewhat thoroughly, 4 = thoroughly*. Agreement between supervisors and supervisees was not strong (ICCs ranged from .02 to .54; Accurso et al., 2011) regarding whether or not a particular practice

element was addressed in session. Supervisees were more likely to report that a particular practice element was discussed.

The measure was adapted for the current study to account for therapeutic practices that have been identified as evidence-based practice elements for children with a range of common youth disorders (Chorpita & Daleiden, 2009). The expansion included techniques for the treatment of anxiety and trauma (i.e., systematic desensitization/exposure) and depression (i.e., identifying and changing maladaptive thoughts). It was also expanded to include elements not cited in the evidence base in order to account for more potential techniques discussed within the context of routine care for children (i.e., interpretation of client's unconscious drive, defense mechanisms). The adapted measure assesses 35 therapeutic techniques. For the purposes of this study, these techniques are referred to as therapeutic content discussed in supervision. The average ICC coefficient between supervisor and supervisee reports was fair (.41) with coefficients ranging from poor (.06) to good (.68) for agreement on degree to which practice elements were discussed in supervision.

Supervision Integrity to Evidence Based Interventions Coding System (SIEBI**).** Supervision integrity, including supervisor use and competence in delivering supervisory micro skills, was assessed using the Supervision Integrity to Evidence Based Interventions coding system (SIEBI; Bearman, Bailin, & Sale, 2015). The SIEBI includes 31 items that comprise formative (supervisee skill development), normative (client safety), and restorative functions (supervisee support). Supervision recordings are coded in 5-minute increments to indicate frequency of micro skills (based on the percentage of 5-minute segments in which micro skills are present), and globally to indicate supervisor competence with each micro skill (skillfulness of delivery, rated as 0 [*not at all*], 1 [superficial or *incomplete*], 2 [*adequate but not optimal*], 3 [*sufficient*], and 4 [*expert*]). SIEBI coders (N = 2) were graduate students who were the second and third authors of the coding system.

Coding training consisted of two steps. First, coders jointly coded four sessions alongside the first author of the coding system and discussed the codes. Second, coders independently coded the same thirteen sessions, and reliability was assessed against one another. Coders demonstrated mean item agreement for both frequency and competence that was above the threshold for "good" reliability (intraclass correlation coefficient [ICC] > .59), according to the standards recommended by Cicchetti (1994). Next, three sessions per dyad and triad were randomly selected for coding (n = 57), and both raters coded each session. Average reliability for the whole sample was in the excellent range for frequency, M ICC [2, 2] = .89 (range .71-1.00) and competency, M ICC [2, 2] = .89 (range .73 - 1.00). The final coding data analyzed was an average of scores between the two raters.

Data Analysis Plan

All study analyses were calculated with SPSS Statistics (version 23). Descriptive analyses were conducted to characterize the format, function, micro skills, and therapeutic content discussed from self-report and observational coding data. Follow-up analyses examined differences in supervisor frequency and competency in the delivery of supervisory strategies on the observational coding system. Independent sample t-tests were conducted to test these differences according to supervisor professional discipline (e.g., master's level or doctorate level), and self-identified theoretical orientation (e.g., CBT or other). Correlations were conducted to determine if there was a significant relationship between supervisor attitudes towards evidence-based practices and their adherence to evidence-based principles in supervision. Correlations were conducted to assess relationships between discussion of therapeutic content and therapist characteristics.

Results

Format of Supervision

Reports from 100 meetings indicated that supervision sessions occurred twice a week to every two weeks and ranged in duration from 43 to 90 minutes, with a mean of 59.71 minutes (*SD* = 7.92). Most sessions occurred in person (98%) as one-on-one meetings (96%) and 4% were considered group meetings with more than two supervisees present in the session. Forty-two percent of sessions included the use of progress notes to determine therapy session content, 11% included skill or therapy checklists, and 1% included use of recording. The number of clients discussed during the session ranged from 0 to 12, with a mean of 3.61 clients (*SD* = 2.23). Across 100 sessions, 75 included discussion of clients with a primary concern of family conflict, 65 with a primary concern of anxiety, 44 with primary concern of depression, 41 with primary concern of relationship problems, 40 with primary concern of disruptive conduct, and 7 clients with a primary concern of substance abuse.

Function of Supervision

Table 2 (Appendix A) displays percentage of session time spent on particular micro skills as reported by supervisors, supervisees, and coders. These include items on the self-report SPQ that operationally aligned with the observational coding system. Supervisors (29.3%), supervisees (21.0%), and coders (26.1%) generally agreed that the majority of session time was spent discussing/recommending therapeutic practice elements. Supervisors and supervisees reported an average of 21.8% of session time devoted to case conceptualization, while coders reported 14% of session time was spent on case conceptualization. Coders reported that 22.3% of session time was devoted to administrative tasks, while supervisors (7.24%) and supervisees (5.66) reported less time spent on such tasks. Reports of supervisory function for micro skills that did not operationally align between the coding system and self-report data are reported in Tables 3 and 4 (Appendix A). There was overall low agreement between self-report

of supervisory function strategies and the coder report of functions. ICC coefficients were in the fair range between coders and supervisors (< .70, Cicchetti, 1994), and in the poor range between coders and supervisees (< .40). Average reliability estimates on micro skills between supervisor and supervisee reports were also in the fair range (< .70).

Participant satisfaction with time spent on these supervisory micro skills assessed if supervisors and supervisees thought there was too little, too much, or just the right time spent on particular components of supervision (Tables 3 and 4 in appendix A). Supervisors reported that discussion of client relationships and alliance building and supervisee professional development was "too short" in 17% of sessions. Supervisees reported insufficient discussion of their professional development in 7% of sessions, and insufficient discussion of therapy interventions in 11% of sessions. There was infrequent (< 6%) reporting across both supervisors and supervisees that "too long" was spent on any individual function of supervision.

Observational coding. In order to describe functions assessed in the observational coding system, supervisory micro skills were categorized into Milne's (2009) three proposed functions of supervision: formative goals (therapist skill development), normative goals (client safety), and restorative goals (therapist emotional support). Table 5 (Appendix A) reports average frequency (based on the percentage of 5-minute segments in which content items were present) and average competence (1-4) with which these elements were delivered.

Results indicate that formative function micro skills with the greatest average frequency included recommending a specific practice element to be used in an upcoming session (26.12%), referencing specific evidence-based practices (20.17%), discussing supervisee's professional development (14.15%), case conceptualization (13.99%) and live modeling (13.49%). The competency with which these items were delivered corresponded with low competency ratings. In particular, referencing specific evidence-based practices was delivered with competence between "incomplete" and "adequate but not optimal" at 1.74 (*SD* = 1.17) and live modeling was

delivered with competence at 1.53 (SD = 0.97), indicating competency ratings between "incomplete" and "adequate but not optimal." Other micro skills that support formative goals, or that increase supervisee skills and knowledge, occurred infrequently, such as corrective feedback which was delivered in just 4 supervision sessions, and role-play, which was delivered in just 1 session across the entire coded sample.

Supervisor frequency utilizing micro skills devoted to ensuring client safety (e.g., normative goals) was greatest for administrative tasks (22.34%), case management (9.52%), and discussion of professional ethics (6.68%). Similar to items that describe formative goals, these items had average competency ratings between "incomplete" and "adequate but not optimal."

The greatest average frequency for strategies related to the restorative function included praise to the supervisee (26.97%), supervisor self-disclosure (19.10%), and collaboration (17.13%). Praise (M = 2.39, SD = 1.04) and self disclosure (M = 2.13, SD = 1.04) were delivered with average competence between "adequate but not optimal" and "sufficient," while the remaining items indicated competency between "incomplete" and "adequate but not optimal."

Supervisor characteristics and supervision function. Independent sample t-tests determined if supervisor-reported therapeutic orientation and professional degree were related to frequency and competency in the delivery of evidence-based supervisory micro skills. In order to reduce the likelihood of Type 1 error, alpha was set at $p < .01$ for all significance tests. There were no significant differences between the frequency of evidence-based supervisory strategies (i.e., modeling, corrective feedback, role-play, discussion of evidence-based practice elements) between doctoral-level psychologists and master's level counselors and social workers. We also conducted independent sample t-tests to determine differences between supervisors that identified as cognitive or cognitive-behavioral (38.5%) in orientation and those that indicated any other therapeutic orientation, which included psychodynamic, family systems, or an eclectic orientation (61.5%). Similarly, no significant differences were found according to therapeutic

orientation. In terms of the competency, or skillfulness in the delivery of these micro skills, the competency with which live modeling was delivered was significantly different between doctoral level psychologists (M = 2.29, SD = 1.18) and master's level therapists (M = 1.13, SD = 0.63), $t(40)$= -4.15, p = .006.

Correlations between overall attitudes towards evidence-based practice, measured by the EBPAS, and evidence-based micro skill usage (i.e., live modeling, role-play, corrective feedback, and discussion of evidence-based strategies) indicated non-significant relationships.

Therapeutic Content of Supervision

Supervisor and supervisee reports of therapy content discussed during their most recent supervision meeting are described in Figures 1 and 2 (Appendix B). There was inconsistent agreement between supervisor and supervisee self-report of therapeutic content discussed in supervision with ICC coefficients in the fair range (<.60 ; Cicchetti, 1994). Of the 100 sessions, supervisors reported that the most frequently discussed therapy strategies included using the therapeutic relationship to correct dysfunctional relationships (90%), goal setting (82%), and defining family roles (80%). Supervisee reports indicated that the most frequently discussed therapy strategies were using the therapeutic relationship to correct dysfunctional relationships (84%), interpretation of in-session behavior (73%), and inclusion of the family in therapy (71%). The following were reported as "never discussed" for the majority of sessions by supervisors: effective time-out (92% of sessions), active ignoring (87% of sessions), developing a behavior chart (78% of sessions), and effective ego functioning (78% of sessions). Among supervisees, "never discussed" items included: effective time out (98% of sessions), active ignoring (94% of sessions), effective ego functioning (85% of sessions), training caregivers in rewards (84% of sessions), and interpretation of unconscious drives (84% of sessions).

Discussion of evidence-based therapeutic practice. Tables 6 and 7 (Appendix A) report the frequency of discussion of therapeutic practice elements that occur most commonly in

research-supported treatment protocols for common youth disorders including anxiety, trauma, depression, and disruptive behavior disorders (Chorpita & Daleiden, 2009).

When one or more clients discussed in supervision presented with anxiety, supervisors reported that at least one evidence-based practice element for anxiety treatment was discussed in 71.4% of sessions, and supervisees reported discussion of any one or more of these strategies in 69.8% of sessions. When clients discussed in supervision presented with trauma, supervisors reported evidence-based strategies from the trauma evidence base discussed in 88.9% of sessions, and supervisees reported discussion of any of these strategies in 74.1% of sessions. Evidence-based strategies for depression were discussed in 97.6% of sessions according to supervisors and 92.9% according to supervisees. Lastly, supervisors reported evidence-based strategy discussion for disruptive behavior disorders in 69.2% of sessions where clients with disruptive behavior disorders were presented, and supervisees reported discussion in 51.3% of sessions. Some of the evidence-based practice elements that occur most frequently in research-supported protocols were rarely discussed (exposure for anxiety and trauma, behavioral activation for depression, and time out and active ignoring for disruptive behavior disorders), while other evidence-based content were discussed more frequently (cognitive strategies for anxiety and trauma, psychoeducation related to affect for depression, and positive attention for disruptive behavior disorders; see Tables 6 and 7 in appendix A for mean percentage of sessions with reported discussion of evidence-based content).

Supervisor characteristics and therapeutic content. Correlations between therapist characteristics (i.e., attitudes towards evidence-based practices, degree type, and theoretical orientation) and discussion of evidence-based therapeutic content were non-significant.

Discussion

This study examining supervision as usual contributes to the small, but growing evidence base on supervision practices within routine care settings for child mental health services. The current study sought to characterize the format, function, micro skills, and therapeutic content of supervision provided to child-focused therapists that treat a range of common mental health disorders, and to characterize the extent to which these practices align with strategies of supervision in rigorous research trials. A secondary goal of the study was to assess if supervisor characteristics predict their use of micro skills commonly practiced in rigorous research trials (e.g., role play, modeling, corrective feedback), as well as therapeutic content discussed. Lastly, this study sought to address some of the methodological limitations identified within the supervision literature (Watkins 2011; Wheeler & Richards, 2007) by using observational coding data to provide an objective characterization of supervision as usual.

Format of Supervision as Usual

Consistent with results from Accurso and colleagues (2011), the format of these meetings was described as in-person, individual, hour-long sessions that utilized progress notes as the primary data source. Out of 100 sessions for which data was collected, only one utilized recording of therapy sessions as a data source for evaluating session content or supervisee competence. Our results support characterizations of supervision within routine care as reliant on verbal discussion of case progress rather than review of recordings from therapy sessions (e.g., Accurso et al., 2011; Hurlburt et al., 2002).

Corrective feedback based on review of recorded therapy has been indicated to improve therapist competence in the delivery of evidence-based practices (Bearman et al., 2016; James et al., 2008). One of the key features of supervision is the ability to give effective feedback (Milne & James, 2000; Milne, 2009) to allow for the "identification and remediation of suboptimal performance" (Roth & Pilling, 2007, p. 23). Effective identification of inadequate competence in

delivering interventions is more difficult when relying only on case discussion, without direct observation of the therapy session. In the current study, there were almost no opportunities for supervisors to identify suboptimal performance, and thus deliver behaviorally anchored feedback (Falender, Shafranske, & Ofek, 2014), as indicated by coding reports of corrective feedback in just 4 sessions with insufficient dosage. Furthermore, usual care research has found that therapists over-report on their use of therapeutic strategies when compared to observer reports (Carroll & Rounsaville, 2007; Hurlburt, Garland, Nguyen, & Brookman-Frazee, 2010). Therefore, reliance on case discussion in the current sample may be problematic for effective scaffolding to achieve formative goals of supervision.

Function of Supervision as Usual

Supervisors utilized micro skills across each of the proposed functions of supervision (formative, normative, restorative). Overall, supervisors and supervisees were satisfied with the time allotted to the micro skills. When dissatisfaction was reported, supervisors and supervisees tended to agree that too little time was spent on particular micro skills.

Supervisor and supervisee report, as well as observational coding, indicated that one of the most frequently utilized micro skills in session was discussion or recommendation of therapy interventions, which supports findings that discussion of practices is the primary method for addressing therapy practice implementation (Accurso et al., 2011). There was also frequent discussion of evidence-based therapy approaches; however, the coding system, which evaluated the competence or skillfulness in the delivery of each micro skill, indicated that supervisor delivery of this micro skill ranged from "superficial or incomplete" to "adequate but not optimal," suggesting insufficient dosage. While this study and others indicate that discussion of therapy interventions is a major component of supervision as usual, research indicates that discussion of interventions alone does not predict competent use of evidence-based strategies in therapy following supervision (Bearman et al., 2013; Bearman et al., 2016).

More optimal delivery of recommendations of practice elements in supervision may have included the use of live modeling and/or role-play. Role-playing and live modeling enacted by the supervisor have been shown to enhance therapist procedural knowledge (Bennett-Levy, 2006), increase therapist competency (Bearman et al., 2016), and predict evidence-based practice use in therapy (Bearman et al., 2013). The current study indicated that role-play was almost never practiced in supervision, and while live modeling occurred more frequently, the average competency rating suggested that the dosage was insufficient. Such low dosage practice of modeling may limit its impact on future therapist behavior in therapy.

Similar to the findings of Accurso and colleagues (2011), on average, supervisors and supervisees reported case conceptualization accounting for about 21% of session time. However, self-report ratings on case conceptualization were higher than frequency reported by the coders. It may be that coders were more stringent in categorizing discussion of clients as case conceptualization. Coders operationalized case conceptualization as discussion of factors that contribute to and maintain a clinical diagnosis, while supervisors and supervisees may have considered more general discussion of clients to be case conceptualization.

Accurso and colleagues' self-report study reported that limited time (~11%) was devoted to administrative tasks in supervision. Our results showed a similar trend (~6%) as self-reported by supervisors and supervisees. These findings are at odds with observational coding data from the current study that showed discussion of administrative tasks was one of the leading micro skills utilized by supervisors in session (22.3% of time). These observational coding data support self-report survey data regarding supervision in community-based substance abuse treatment programs for adults, for which discussion of administrative tasks was a primary component (i.e., paperwork; Carroll & Rounsaville, 2007).

These findings provide insight into the context of typical service delivery for which Hoagwood and Kolko (2009) caution we cannot improve without trying to understand the

existing context. The results not only indicate potential barriers to the implementation of the time-consuming effective supervision practice (e.g., role-play and live modeling), but also highlight a difference between supervision as usual and supervision provided in research trials. Administrative tasks appear to be an integral component of supervision as usual, and may support normative goals that foster effective and safe clinical practice. For instance, administrative tasks may develop therapist competency in the process of informed consent, or these tasks may develop therapist professionalism in the work environment by completing progress notes in a timely manner—skills with less relevance in a controlled research trial. These findings can inform targeted quality improvement efforts developed by research and regulatory bodies by allotting opportunities within the scope of evidence-based supervisory practice for administrative tasks that develop supervisee competency in skills unique to routine care settings.

Interestingly, despite the lack of evidence-based strategies in supervision as usual, supervisees reported overall satisfaction with the time devoted to each reported micro skill[1], as well as overall satisfaction with supervision. This suggests that supervisees may not know what constitutes effective supervision. Since many mental health professionals have limited training in supervision (see Kadushin, 1992; Scott, Ingram, Vitanza, & Smith, 2000), supervisees may not know that supervision could be improved to the benefit of their own competent therapy practice.

Characterizations of Supervisors and their Practice

Results indicated that professional degree, therapeutic orientation, and attitudes towards evidence-based practices were not related to use of evidence-based supervisory strategies (live modeling, role-playing, providing corrective feedback, and discussion of evidence-based practices). These results extend findings from the therapy literature that show that therapist characteristics (i.e., professional degree, training level, therapeutic orientation, and attitudes) do

[1]Mean supervisee satisfaction across 100 supervision sessions was 26.16 (*SD* = 3.55) on a 7-item satisfaction rating scale from 0 to 28.

not predict use of evidence-based practices in therapy (Bearman et al., 2013) or client outcomes (Michael, Huelsman, & Crowley, 2005).

The only significant finding in the current study related to therapist characteristics was that doctoral level supervisors delivered live modeling with greater competency than their master's level colleagues. And, while independent sample t-tests did not indicate significant differences between degree type and the frequency in delivery of supervision (due, in part, to unequal group sizes) doctoral psychologists (n = 4) did on average use more live modeling (~22%) than master's level therapists (n = 9, ~10%). Live modeling of therapy strategies was the only predictor of adherence to therapeutic practices utilized in the next therapy session after supervision in one effectiveness trial (Bearman et al., 2013), so supervisees who observed live modeling in the current study, particularly those receiving supervision from doctoral psychologists, may have been more likely to utilize these modeled strategies in the therapy sessions that followed.

Taken together, the evidence from the current study suggests that therapist characteristics are not strong predictors of evidence-based supervisory practice. Thus, while supervisors reported subscribing to therapeutic components of the evidence base, these reports did not translate to their inclusion in supervisory practice.

Content of Supervision as Usual

Accurso and colleagues (2011) reported that practice elements common in evidence-based treatments for disruptive behavior disorders were discussed in session, but thorough coverage was rare. The current study found similar results for evidence-based practice elements for common youth disorders: anxiety, trauma, depression, and disruptive behavior disorders. Although supervisors often discussed at least one evidence-based practice element per diagnostic category in the majority of sessions, many integral components of treatment approaches were largely absent. In particular, exposure for anxiety and trauma was rarely discussed, which aligns

with findings of usual care therapy that indicate infrequent use of this evidence-based strategy in therapy (Borntrager et al., 2013)—despite the fact that this is the most frequently used strategy in evidence-based treatment protocols for anxiety and trauma (Chorpita & Daelidan, 2009). Similarly, behavioral activation for the treatment of depression and core components of parent management training (i.e., time out and effective instructions) for clients with disruptive behavior disorders were notably absent from discussion or practice in supervision. Despite reports of favorable attitudes towards evidence-based practices and theoretical orientations based in evidence-based strategies (CBT), discussion of evidence-based content was often brief, suggesting a gap between knowledge and attitudes, and actual practice.

Coding data also supported these findings; while discussion of evidence-based treatment approaches occurred frequently, results showed that this micro skill was delivered with insufficient dosage, discussed above. The results on therapeutic content discussed in supervision provide a sensible explanation for the infrequent and insufficient delivery of evidence-based practices in usual care therapy for youth (Bailin et al., 2015; Garland et al., 2014). Because supervision is proposed as the primary method through which therapists learn psychotherapeutic practice (Lambert & Ogles, 1997), it seems logical that supervisor failure to competently deliver training on or support for evidence-based practices during supervision might lead to supervisee failure to competently deliver these strategies in therapy.

Current findings indicate that, even supervisors well versed in evidence-based strategies and those that report favorable attitudes towards evidence-based practices, often do not utilize supervisory strategies that are likely to result in high-quality practice. In 2010, the Psychology Board of Australia (PBA) targeted inadequate psychotherapy by passing licensure regulations to implement a competency-based approach to the professional practice of supervision. These regulatory efforts followed findings of ineffective supervisory practice and evidence that the large majority of Australian allied health supervisors had not received training in supervision

(Kavanagh et al., 2003). Current regulatory policies for practicing psychology supervisors in Australia require that supervisors have three years of post graduate training psychology experience, and complete a board-approved training program in psychology supervision prior to acting as a board-approved supervisor (PBA, 2009).

In light of recognition of evidence-based supervisory strategies (i.e., model-specific content, role-play, live modeling, corrective feedback) determined by investigation of supervision in RCTs and other controlled experimentation (Bearman et al., 2013; Bearman et al., 2016; Roth & Pilling, 2010; Schoenwald et al., 2009), training supervisors in the US in these strategies may help supervisors learn the means by which they may confer knowledge on their supervisees. Requirements for supervisor trainings, similar to those mandated in Australia, may also make the expectations for effective supervisory practice more transparent to supervisees, such that there is greater accountability for supervisors to use evidence-based strategies.

Limitations

This is one of the few existing studies to examine supervision within routine practice settings for youth mental health. This study extends the self-report characterization of supervision provided to therapists treating disruptive behavior disorders in community settings (Accurso et al., 2011), to include a wider range of youth disorders beyond disruptive behavior. Additionally, use of objective coding data addresses one of the reported methodological flaws of the supervision literature: the reliance on self-report data (Watkins 2011; Wheeler & Richards, 2007). Though the sample is fairly small, participants represent a range of mental health disciplines, clinical experiences, and therapeutic orientations. Participating supervisors and supervisees were mostly female, Caucasian, and master's level therapists, representative of community clinicians (Glisson et al., 2008).

This study did not assess supervisee behavior in session with clients, and therefore cannot assess the impact of supervision on therapeutic practice. In addition, we did not collect client

data to draw conclusions about the way that supervision impacts outcomes. Future research that links supervisory practice to therapist behaviors within routine practice is needed. Furthermore, it is essential to demonstrate that supervision contributes to client outcomes, termed the "acid test" or "gold standard" of clinical supervision efficacy (Ellis and Ladany, 1997; Bernard & Goodyear, 2009). Such data may uncover the components of supervisory practice that are relevant for various settings, training levels of the supervisee, and presenting problems of the client.

This study assessed the extent to which evidence-based practice elements for common youth disorders were addressed in supervision as usual. Analysis of these evidence-based elements was limited by self-report data. Supervisees reported on the primary concerns of their clients, and these reports were used to determine the extent to which supervisors introduced evidence-based elements that corresponded with those reported diagnoses. From the data, we were not able to assess for co-morbid presenting problems, which are in fact the norm of youth clients who present to community mental health (Brent, Kolko, Birmaher, Baugher, & Bridge, 1998; Weisz et al., 2009). Future research may explore the discussion of therapeutic content in supervision in relation to co-morbid diagnoses.

Conclusion

This study is one of the first attempts to understand the practice of routine supervision for youth mental health services. Supervision occurs on a frequent, recurring basis in settings that provide care to a large proportion of youth receiving mental health services, and may therefore be leveraged to enhance the therapeutic practice of mental health professionals to ultimately improve client outcomes. With acknowledgement of supervision's training potential by both researchers and professional licensing bodies (e.g., APA), there is greater need to evaluate and dismantle the effective components of this practice. The current study sought to determine the extent to which supervisors utilize these strategies, and deduce other relevant components of

supervision unique to routine practice settings. The findings highlight potential barriers to effective psychotherapeutic practice, including the limited use of active learning strategies (role play and modeling), a lack of recording review and corrective feedback, and inadequate coverage of evidence-based therapeutic content. Findings also indicate that there are unique micro skills within supervision as usual, such as administrative tasks, that may in fact be critical in the regulation of safe and professional clinical practice in the real world.

Current findings direct attention to missed opportunities to impart knowledge and skill in newly minted therapists serving children. They also have implications for training and policy related to competency-based supervision, which targets the competent practice of supervision, as well as supervisee learning outcomes (Falender & Shafranske, 2007). Just as large-scale dissemination efforts for evidence-based mental health interventions supported by state-level and other regulating bodies have increased the available training opportunities and supports for treatment intervention (see Hoagwood et al., 2014), similar efforts may follow for evidence-based supervision. This could mirror the efforts of regulatory policies in Australia, mandating training in effective supervision practice. These regulations may be informed by future research that links supervisory practices in supervision as usual to supervisee knowledge and competency in therapy. Just as RCTs have linked supervisory practice (e.g., live modeling) to supervisee behavior (e.g., adherence to intervention), future descriptive research as well as experimental manipulation of supervision as usual may determine if these strategies have the same impact on supervisee practice within routine care. The current study found that evidence-based supervisory strategies are largely absent from usual supervision practice, making these strategies a potential area for improvement in routine care settings.

Appendix A—Tables

Table 1

Supervisor and Supervisee Characteristics

Characteristics	Supervisor (N = 13) Mean (SD) [Range]	Supervisee (N = 20) Mean (SD) [Range]
Age	41.38 (9.31)	29.5 (4.74)
Years of clinical experience	11.35 (9.49) [3, 40]	1.5 (1.45) [0, 3]
Weekly hours providing/receiving individual supervision	3.15 (1.68)	1.00 (0.49)
	N (%)	N (%)
Female	12 (92.31)	19 (95.00)
Race/Ethnicity		
Caucasian	13 (100)	17 (85.00)
Hispanic/Latino		1 (5.00)
Asian		1 (5.00)
Other		1 (5.00)
Professional Specialty		
MFC/MFT/LPC	6 (46.15)	10 (50.00)
MSW	3 (23.08)	5 (25.00)
PhD/PsyD	4 (30.77)	4 (20.00)
RN		1 (5.00)
Theoretical Orientation		
Psychodynamic	1 (7.69)	1 (5.00)
Behavioral or Cognitive-behavioral	5 (38.46)	8 (40.00)
Family Systems	3 (23.08)	6 (30.00)
Other/integrated	4 (30.77)	5 (25.00)
State Licensed	13 (100)	17 (85.00)

Table 2

Frequency of Supervision Micro Skills Self-Reported by Supervisors, Supervisees, and Coders

	Supervisor	Supervisee	Coders
		M (SD)	
Therapy Interventions/Approaches	29.29 (17.95)	21.04 (17.01)	26.12 (20.96)
Case Conceptualization/Formulation	20.83 (13.23)	22.78 (17.14)	13.99 (12.31)
Supervisee's Professional/Academic Roles	10.84 (13.24)	9.30 (15.37)	14.15 (19.66)
Administrative Tasks	7.24 (11.93)	5.66 (9.02)	22.34 (16.64)
Case Management Issues	6.95 (7.75)	4.75 (6.54)	9.52 (12.46)

Table 3

Frequency and Satisfaction of Micro Skills Reported by Supervisors

	Supervisor		
	Frequency *M (SD)*	"Too short" %	"Too long" "%
Therapy Interventions/Approaches	29.29 (17.95)	14	0
Case Conceptualization/Formulation	20.83 (13.23)	12	0
Client Relationship/Alliance Building	12.64 (11.17)	17	1
Supervisee's Professional/Academic Roles	10.84 (13.24)	17	0
Crisis Assessment	7.61 (12.81)	4	1
Administrative Tasks	7.24 (11.93)	5	2
Case Management Issues	6.95 (7.75)	3	0
Supervisory Relationship/Process	3.83 (5.94)	13	0

Table 4

Frequency and Satisfaction of Micro Skills Reported by Supervisees

	Supervisee		
	Frequency *M (SD)*	"Too short" %	"Too long" %
Therapy Interventions/Approaches	21.04 (17.01)	11	0
Case Conceptualization/Formulation	22.78 (17.14)	4	0
Client Relationship/Alliance Building	13.54 (13.24)	6	0
Supervisee's Professional/Academic Roles	9.30 (15.37)	7	1
Crisis Assessment	5.95 (10.55)	2	0
Administrative Tasks	5.66 (9.02)	2	0
Case Management Issues	4.75 (6.54)	5	0
Supervisory Relationship/Process	2.56 (5.15)	6	0

Table 5

Frequency and Competence of Micro Skills from Observational Coding Data

	Frequency	Competence
Micro Skill (Function[a])	Mean (SD)	
Praise (R)	26.97 (17.69)	2.39 (1.04)
Recommended Practice Element (F)	26.12 (20.96)	2.30 (1.12)
Administration (N)	22.34 (16.64)	2.04 (0.99)
EB Practice Elements (F)	20.17 (24.21)	1.74 (1.17)
Self Disclosure (R)	19.10 (15.78)	2.13 (1.04)
Collaboration (R)	17.13 (18.27)	1.89 (1.03)
Empathy (R)	15.85 (14.37)	1.76 (1.30)
Professional Development (F)	14.15 (19.66)	1.72 (1.17)
Case Conceptualization (F)	13.99 (12.31)	1.55 (0.87)
Live Modeling (F)	13.49 (14.63)	1.53 (0.97)
Case Management (N)	9.52 (12.46)	1.38 (1.02)
Professional Ethics (N)	6.68 (10.22)	1.60 (0.83)
Teaching Theory (F)	5.39 (8.72)	1.25 (0.69)
Supervisee Wellbeing (R)	4.72 (7.87)	1.63 (1.28)
Acknowledges Competency (R)	4.31 (5.85)	1.05 (0.74)
Countertransference (R)	3.17 (6.30)	1.75 (0.78)
Relationship Factors (F)	2.74 (4.85)	1.19 (0.70)
Problem Solving Barriers (F)	2.73 (6.28)	1.46 (0.93)
Personalization of Practice Element (F)	2.61 (5.45)	1.46 (0.85)
Follow Up (N)	1.80 (4.48)	1.33 (0.66)
Strategy Specificity (N)	1.34 (3.18)	1.18 (0.40)
Client Data (N)	1.32 (3.87)	1.14 (0.48)
Homework (F)	1.19 (3.47)	1.79 (0.91)
Corrective Feedback (F)	0.93 (4.65)	1.50 (1.41)
Multicultural (F)	0.92 (3.24)	1.30 (0.67)
Set Agenda (N)	0.84 (2.82)	1.08 (0.49)
Addressing Crises (N)	0.75 (3.14)	1.25 (0.50)
Self-Assessment (F)	0.52 (2.32)	1.50 (0.50)
Role Playing (F)	0.33 (2.50)	4.00 (0.00)
Criticism (R)	0.32 (1.69)	1.00 (0.00)
EB Clinical Decision Making (F)	0	0

[a] R = restorative function; F = formative function; N = normative function.

Table 6

Mean Percentage of Evidence-Based Therapeutic Content Reported by Supervisor

Evidence-Based Content	Not at all	Very Briefly	Somewhat Thoroughly	Thoroughly
Anxiety				
Exposure	70.20	17.50	10.50	1.80
Maladaptive Thoughts	36.80	35.10	22.80	5.30
Relaxation	52.60	36.80	8.80	1.80
Trauma				
Exposure	54.40	26.30	15.80	3.50
Maladaptive Thoughts	31.60	33.30	28.10	7.00
Relaxation	47.40	36.80	12.30	3.50
Depression				
Affect Education	18.40	44.70	34.20	2.60
Behavioral Activation	52.60	13.20	31.60	2.60
Cognitive Triad	21.10	34.10	68.20	2.60
Maladaptive Thoughts	26.30	42.10	26.30	5.30
Mood Monitoring	26.40	36.80	26.30	10.50
Problem Solving	34.20	21.10	39.50	5.20
Psychoeducation	34.30	36.80	26.30	2.60
Relaxation	50.00	39.50	7.90	2.60
Disruptive Behavior Disorders				
Active Ignoring	72.90	16.70	8.30	2.10
Positive Attention	37.50	39.60	14.60	8.30
Positive Reinforcement	52.10	29.20	16.70	2.10
Time Out	87.50	8.30	4.20	0.00

Table 7

Mean Percentage of Evidence-Based Therapeutic Content Reported by Supervisee

Evidence-Based Content	Not at all	Very Briefly	Somewhat Thoroughly	Thoroughly
Anxiety				
Exposure	82.50	11.10	1.60	4.80
Maladaptive Thoughts	39.70	34.90	17.50	7.90
Relaxation	71.40	14.30	12.70	1.60
Trauma				
Exposure	79.60	14.80	5.60	0.00
Maladaptive Thoughts	40.70	27.80	22.20	9.30
Relaxation	59.30	25.90	9.30	5.50
Depression				
Affect Education	45.20	28.60	14.30	11.90
Behavioral Activation	42.90	33.30	21.40	2.40
Cognitive Triad	35.70	21.40	31.00	11.90
Maladaptive Thoughts	35.70	33.30	21.50	9.50
Mood Monitoring	23.80	35.70	23.80	16.70
Problem Solving	35.70	28.60	14.30	21.40
Psychoeducation	38.10	26.20	28.60	7.10
Relaxation	61.90	19.00	11.90	7.20
Disruptive Behavior Disorders				
Active Ignoring	89.70	10.30	0.00	0.00
Positive Attention	48.70	35.90	2.60	12.80
Positive Reinforcement	69.20	15.40	2.60	12.80
Time Out	94.80	0.00	2.60	2.60

Appendix B—Figures

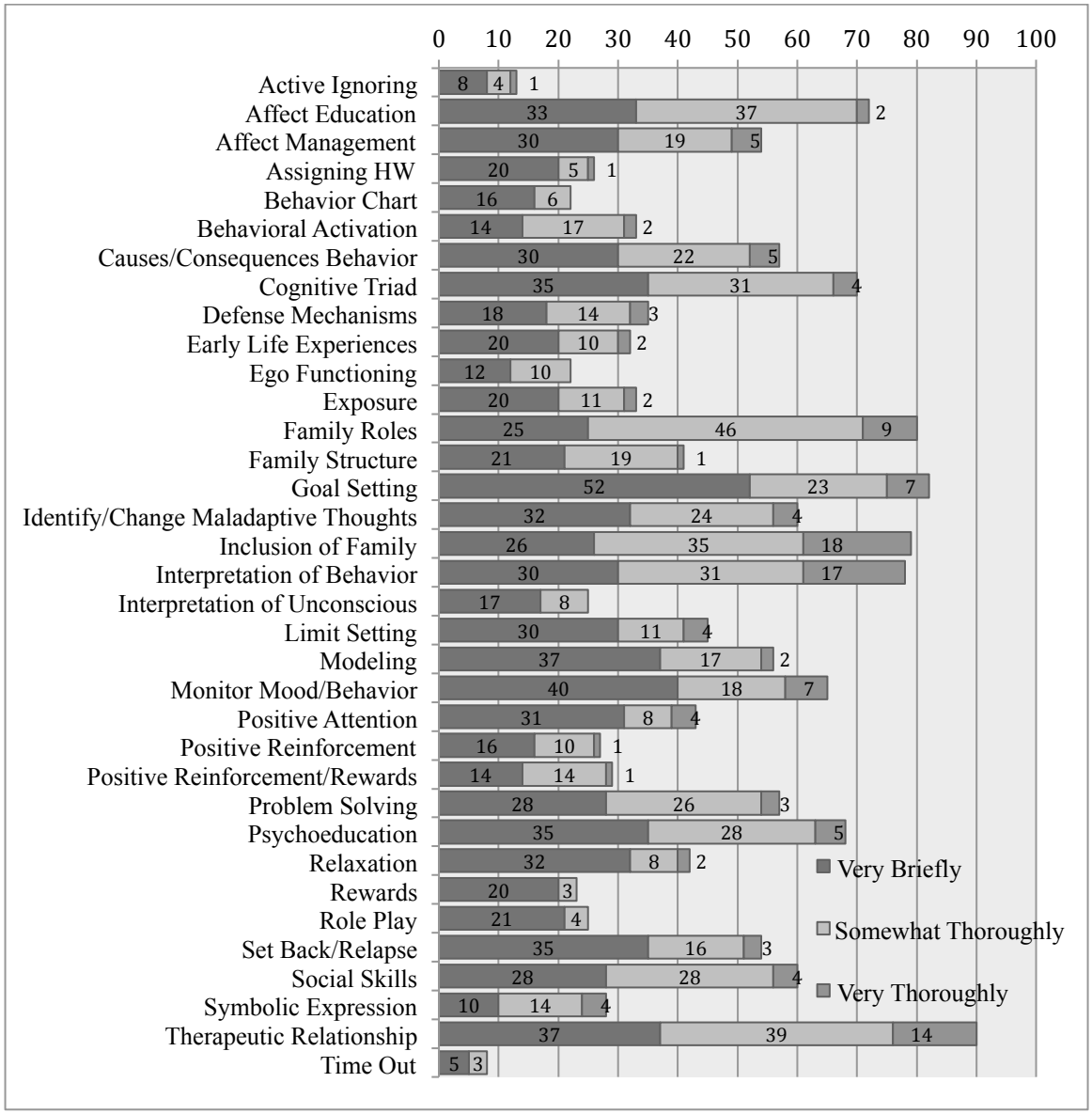

Figure 1. Percentage of supervision sessions addressing therapeutic content reported by supervisor.

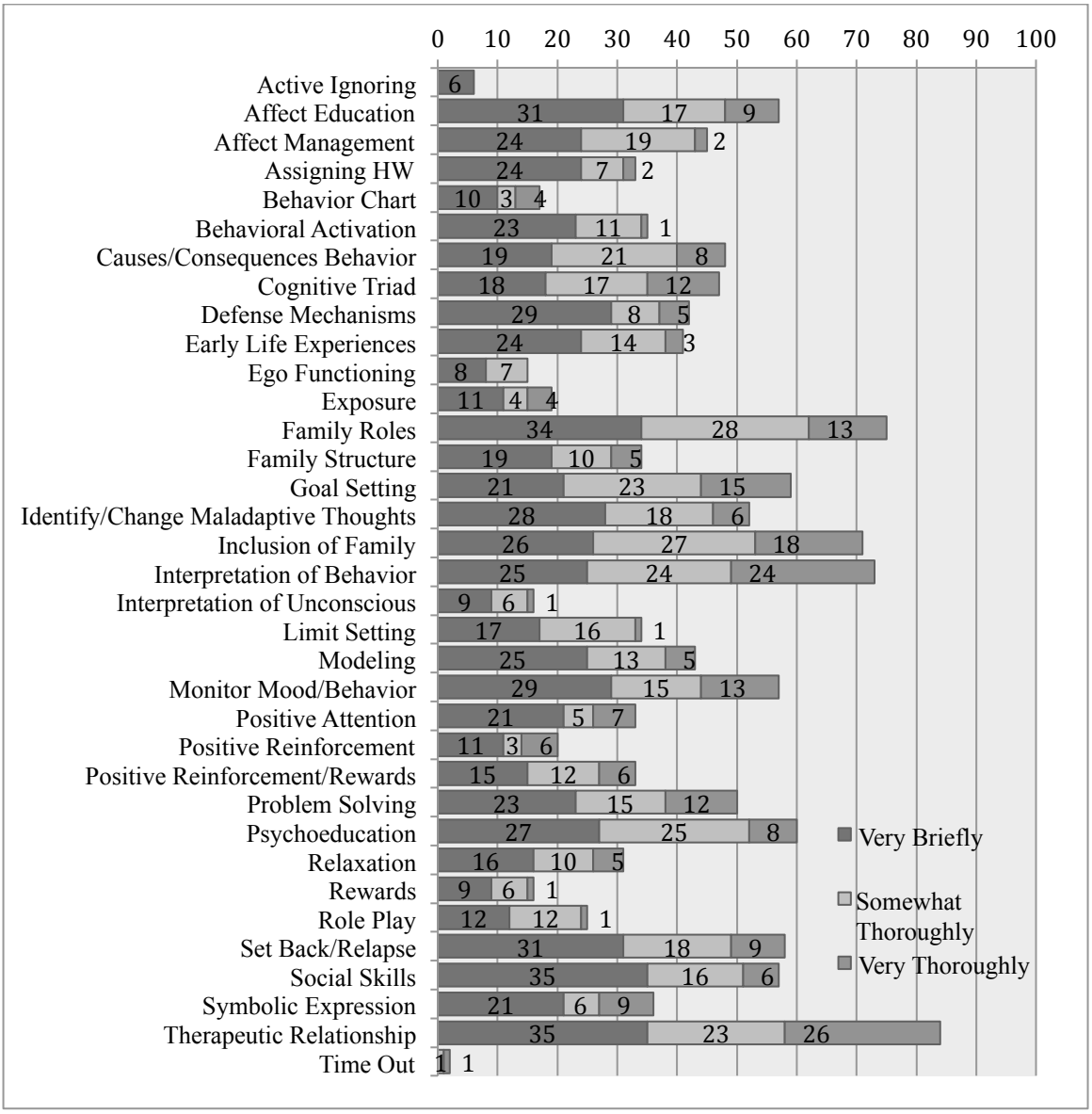

Figure 2. Percentage of supervision sessions addressing therapeutic content reported by supervisee.

References

Aarons, G. A., Cafri, G., Lugo, L., & Sawitzky, A. (2012). Expanding the domains of attitudes towards evidence-based practice: The Evidence Based Practice Attitude Scale-50. *Administration and Policy in Mental Health And Mental Health Services Research*, *39*(5), 331-340. doi:10.1007/s10488-010-0302-3

Accurso, E. C., Taylor, R. M., & Garland, A. F. (2011). Evidence-based practices addressed in community-based children's mental health clinical supervision. *Training and Education in Professional Psychology*, *5*(2), 88-96. doi:10.1037/a0023537

American Association for Marriage and Family Therapy. (2007). *AAMFT approved supervisor designation standards and responsibilities handbook*. Retrieved from http://www.aamft.org/imis15/Documents/Approved_Supervisor_handbook.pdf

Ashcraft, R. P., Foster, S. L., Lowery, A. E., Henggeler, S. W., Chapman, J. E., & Rowland, M. D. (2011). Measuring practitioner attitudes toward evidence-based treatments: A validation study. *Journal of Child & Adolescent Substance Abuse*, *20*(2), 166-183. doi:10.1080/1067828X.2011.555276

Bailin, A., Sale, R., & Bearman, S.K. (2015, November). Evidence-based quality indicators in youth community mental health services: What is usual in usual care? In *Looking for Evidence of Evidence-Based Practice in Routine Care: What Practices Have Closed the Gap?* Paper presented at the 49th annual conference of the Association for Behavioral and Cognitive Therapies, Chicago, Illinois.

Bearman, S. K., Bailin, A., Sale, R. (2015). *Supervision Integrity to Evidence Based Interventions Coding System*. Unpublished manual.

Bearman, S. K., Schneiderman, R. L., & Zoloth, E. (2016). Building an evidence base for effective supervision practices: An analogue experiment of supervision to increase EBT fidelity. *Administration and Policy in Mental Health And Mental Health Services Research*, doi:10.1007/s10488-016-0723-8

Bearman, S. K., Weisz, J. R., Chorpita, B. F., Hoagwood, K., Ward, A., Ugueto, A. M., & Bernstein, A. (2013). More practice, less preach? The role of supervision processes and therapist characteristics in EBP implementation. *Administration and Policy in Mental Health and Mental Health Services Research*, *40*(6), 518-529. doi:10.1007/s10488-013-0485-5

Beidas, R. S., & Kendall, P. C. (2010). Training therapists in evidence-based practice: A critical review of studies from a systemscontextual perspective. *Clinical Psychology: Science and Practice,17*(1), 1–30. doi:10.1111/j.1468-2850.2009.01187.x.

Bennett-Levy, J. (2006). Therapist skills: A cognitive model of their acquisition and refinement. *Behavioural and Cognitive Psychotherapy*, *34*(1), 57-78. doi:10.1017/S1352465805002420

Bennett-Levy, J., McManus, F., Westling, B. E., & Fennell, M. (2009). Acquiring and refining CBT skills and competencies: Which training methods are perceived to be most effective?. *Behavioural and Cognitive Psychotherapy*, *37*(5), 571-583. doi:10.1017/S1352465809990270

Bernard, J. M., & Goodyear, R. K. (2009). *Fundamentals of clinical supervision* (4th ed.). Upper Saddle River, NJ: Merrill.

Bickman, L., Lambert, E. W., Andrade, A. R., & Penaloza, R. V. (2000). The Fort Bragg Continuum of Care for children and adolescents: Mental health outcomes over 5 years.

Journal of Consulting and Clinical Psychology, *68*, 710–716.

Bickman, L., Noser, K., & Summerfelt,W. T. (1999). Long-term effects of a system of care on children and adolescents. *Journal of Behavioral Health Services and Research, 26*, 185–202.

Borders, L. D., DeKruyf, L., Fernando, D. M., Glosoff, H. L., Hays, D. G., Page, B., & Welfare, L. E. (2011). Best practices in clinical supervision. Alexandria, VA: Association for Counselor Education and Supervision. Retrieved from http://www.acesonline.net/wpcontent/uploads/2011/10/ACES-Best-Practices-in-clinical-supervision-document-FINAL.pdf

Borntrager, C., Chorpita, B. F., Higa-McMillan, C. K., Daleiden, E. L., & Starace, N. (2013). Usual care for trauma-exposed youth: Are clinician-reported therapy techniques evidence-based?. *Children and Youth Services Review*, *35*(1), 133-141. doi:10.1016/j.childyouth.2012.09.018

Brent, D. A., Kolko, D. J., Birmaher, B., Baugher, M., & Bridge, J. (1999). A clinical trial for adolescent depression: Predictors of additional treatment in the acute and follow-up phases of the trial. *Journal of The American Academy of Child and Adolescent Psychiatry*, *38*(3), 263-271. doi:10.1097/00004583-199903000-00013

Brookman-Frazee, L., Haine, R. A., Baker-Ericzén, M., Zoffness, R., & Garland, A. F. (2010). Factors associated with use of evidence-based practice strategies in usual care youth psychotherapy. *Administration and Policy in Mental Health and Mental Health Services Research*, *37*(3), 254-269. doi:10.1007/s10488-009-0244-9

Carroll, M. (1988). Counselling supervision: The British context. *Counselling Psychology Quarterly*, *1*(4), 387-396. doi:10.1080/09515078808254224

Carroll, K. M., & Rounsaville, B. J. (2007). A vision of the next generation of behavioral therapies research in the addictions. *Addiction*, *102*(6), 850-862. doi:10.1111/j.1360-0443.2007.01798.x

Chorpita, B. F., & Daleiden, E. L. (2009). Mapping evidence-based treatments for children and adolescents: Application of the distillation and matching model to 615 treatments from 322 randomized trials. *Journal of Consulting and Clinical Psychology, 77*(3), 566–579. doi:10.1037/a0014565.

Chorpita, B. F., Weisz, J. R., Daleiden, E. L., Schoenwald, S. K., Palinkas, L. A., Miranda, J., & ... Gibbons, R. D. (2013). Long-term outcomes for the Child STEPs randomized effectiveness trial: A comparison of modular and standard treatment designs with usual care. *Journal of Consulting and Clinical Psychology*, *81*(6), 999-1009. doi:10.1037/a0034200

Cichetti, D. V. (1994). Guidelines, criteria, and rule of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment, 6*, 284–290.

Couchon, W. D., & Bernard, J. M. (1984). Effects of timing of supervision on supervisor and counselor performance. *The Clinical Supervisor*, *2*(3), 3-20. doi:10.1300/J001v02n03_02

Counselor Licensure Requirements in Texas. (n.d.). Counselor-license: A state by state counselor guide. Retrieved from http://www.counselor-license.com/states/texas-counselor-license.html#context/api/listings/prefilter.

Dittman, M. (2004, January). What you need to know to get licensed: Experts offer a lesson on how to become a licensed psychologist. *American Psychological Association*

gradPSYCH Magazine. Retrieved from http://www.apa.org/gradpsych/2004/01/get-licensed.aspx

Ellis, M. V., & Ladany, N. (1997). *Inferences concerning supervisees and clients in clinical supervision: An integrative review*. In C. E. Watkins, Jr. (Ed.), Handbook of psychotherapy supervision (pp. 447–507). New York: Wiley.

Falender, C. A., Cornish, J. E., Goodyear, R., Hatcher, R., Kaslow, N. J., Leventhal, G., & ... Grus, C. (2004). Defining competencies in psychology supervision: A consensus statement. *Journal of Clinical Psychology*, *60*(7), 771-785. doi:10.1002/jclp.20013

Falender, C. A., & Shafranske, E. P. (2007). Competence in competency-based supervision practice: Construct and application. *Professional Psychology: Research and Practice*, *38*(3), 232-240. doi:10.1037/0735-7028.38.3.232

Falender, C. A., & Shafranske, E. P. (2012). The importance of competency-based clinical supervision and training in the twenty-first century: Why bother?. *Journal of Contemporary Psychotherapy*, *42*(3), 129-137. doi:10.1007/s10879-011-9198-9

Falender, C. A., Shafranske, E. P., & Ofek, A. (2014). Competent clinical supervision: Emerging effective practices. *Counselling Psychology Quarterly*, *27*(4), 393-408. doi:10.1080/09515070.2014.934785

Freitas, G. J. (2002). The impact of psychotherapy supervision on client outcome: A critical examination of 2 decades of research. *Psychotherapy: Theory, Research, Practice, Training*, *39*(4), 354-367. doi:10.1037/0033-3204.39.4.354

Garland, A. F., Accurso, E. C., Haine-Schlagel, R., Brookman-Frazee, L., Roesch, S., & Zhang, J. J. (2014). Searching for elements of evidence-based practices in children's usual care and examining their impact. *Journal of Clinical Child and Adolescent*

Psychology, *43*(2), 201-215. doi:10.1080/15374416.2013.869750

Garland, A. F., Haine-Schlagel, R., Accurso, E. C., Baker-Ericzén, M. J., & Brookman-Frazee, L. (2012). Exploring the effect of therapists' treatment practices on client attendance in community-based care for children. *Psychological Services*, *9*(1), 74-88. doi:10.1037/a0027098

Glisson, C., Schoenwald, S. K., Kelleher, K., Landsverk, J., Hoagwood, K. E., Mayberg, S., & Green, P. (2008). Therapist turnover and new program sustainability in mental health clinics as a function of organizational culture, climate, and service structure. *Administration and Policy In Mental Health and Mental Health Services Research*, *35*(1-2), 124-133. doi:10.1007/s10488-007-0152-9

Gonsalvez, C. J., & Milne, D. L. (2010). Clinical supervisor training in Australia: A review of current problems and possible solutions. *Australian Psychologist, 45*, 233–242. doi:10.1080/00050067.2010. 512612.

Guidelines for clinical supervision in health service psychology. (2015). *American Psychologist*, *70*(1), 33-46. doi:10.1037/a0038112

Henggeler, S. W., Schoenwald, S. K., Liao, J. G., Letourneu, E. J., & Edwards, D. L. (2002). Transporting efficacious treatments to field settings: The link between supervisory practices and therapist fidelity in MST programs. *Journal of Clinical Child and Adolescent Psychology, 31*(2), 155–167. doi:10.1207/153744202753604449.

Hoagwood, K., & Kolko, D. J. (2009). Introduction to the special section on practice contexts: A glimpse into the nether world of public mental health services for children and families. *Administration and Policy in Mental Health and Mental Health Services Research*, *36*(1), 35-36. doi:10.1007/s10488-008-0201-z

Hoagwood, K. E., Olin, S. S., Horwitz, S., McKay, M., Cleek, A., Gleacher, A., & ... Hogan, M. (2014). Scaling up evidence-based practices for children and families in New York State: Toward evidence-based policies on implementation for state mental health systems. *Journal of Clinical Child and Adolescent Psychology*, *43*(2), 145-157. doi:10.1080/15374416.2013.869749

Hoge, M. A., Migdole, S., Farkas, M. S., Ponce, A. N., & Hunnicutt, C. (2011). Supervision in public sector behavioral health: A review. *The Clinical Supervisor*, *30*(2), 183-203. doi:10.1080/07325223.2011.604276

Holloway, E. L., & Neufeldt, S. A. (1995). Supervision: Its contributions to treatment efficacy. *Journal of Consulting And Clinical Psychology*, *63*(2), 207-213. doi:10.1037/0022-006X.63.2.207

How much does LCSW supervision really cost? (2014, January 24). Supervision Today. Retrieved from http://www.supervisiontoday.net/lcsw-supervision-really-cost-lcswsupervisorscom/.

Hurlburt, M. S., Garland, A. F., Nguyen, K., & Brookman-Frazee, L. (2010). Child and family therapy process: Concordance of therapist and observational perspectives. *Administration and Policy in Mental Health and Mental Health Services Research*, *37*(3), 230-244. doi:10.1007/s10488-009-0251-x

Hurlburt, M., Zima, B., Lau, A., Culver, S., & Knapp, P. (2002, April). Characteristics of California outpatient specialty mental health service providers: Implications for the application of empirically supported treatments. Poster session presented at The 15th International Conference on Mental Health Services Research: Washington, DC.

James, I. A., Milne, D., & Morse, R. (2008). Microskills of clinical supervision:

Scaffolding skills. *Journal of Cognitive Psychotherapy*, *22*(1), 29-36. doi:10.1891/0889.8391.22.1.29

Kadushin, A. (1992). *Supervision in social work*. Columbia University Press: New York.

Kavanagh, D. J., Spence, S. H., Strong, J., Wilson, J., Sturk, H., & Crow, N. (2003). Supervision Practices in Allied Mental Health: Relationships of Supervision Characteristics to Perceived Impact and Job Satisfaction. *Mental Health Services Research*, *5*(4), 187-195. doi:10.1023/A:1026223517172

Kilminster, S. M., & Jolly, B. C. (2000). Effective supervision in clinical practice settings: A literature review. *Medical education*, *34*(10), 827-840.

Kivlighan, D. M., Angelone, E. O., & Swafford, K. G. (1991). Live supervision in individual psychotherapy: Effects on therapist's intention use and client's evaluation of session effect and working alliance. *Professional Psychology: Research and Practice*, *22*(6), 489-495. doi:10.1037/0735-7028.22.6.489

Kolko, D. J., Cohen, J. A., Mannarino, A. P., Baumann, B. L., & Knudsen, K. (2009). Community treatment of child sexual abuse: A survey of practitioners in the National Child Traumatic Stress Network. *Administration and Policy in Mental Health and Mental Health Services Research*, *36*(1), 37-49. doi:10.1007/s10488-008-0180-0

Lambert, M. J., & Ogles, B. M. (1997). The effectiveness of psychotherapy supervision. In C. J. Watkins, C. J. Watkins (Eds.), *Handbook of psychotherapy supervision* (pp. 421-446). Hoboken, NJ, US: John Wiley & Sons Inc.

Margison, F. R., Barkham, M., Evans, C., McGrath, G., Clark, J. M., Audin, K., & Connell, J. (2000). Measurement and psychotherapy: Evidence-based practice and practice-based evidence. *The British Journal of Psychiatry*, *177,* 123-130.

doi:10.1192/bjp.177.2.123

Michael, K. D., Huelsman, T. J., & Crowley, S. L. (2005). Interventions for Child and Adolescent Depression: Do Professional Therapists Produce Better Results?. *Journal of Child and Family Studies*, *14*(2), 223-236. doi:10.1007/s10826-005-5050-8

Milne, D. L. (2009). *Evidence-based clinical supervision: Principles and Practice*. Oxford: Wiley/Blackwell.

National Association of Social Workers and Association of Social Work Boards. (2013). *Best practice standards in social work supervision*. Retrieved from http://www.socialworkers.org/practice/naswstandards/supervisionstandards2013.pdf

Nelson, T. S., Chenail, R. J., Alexander, J. F., Crane, D. R., Johnson, S. M., & Schwallie, L. (2007). The development of core competencies for the practice of marriage and family therapy. *Journal of Marital and Family Therapy, 33*(4), 417–438.

Rakovshik, S. G., & McManus, F. (2010). Establishing evidence-based training in cognitive behavioral therapy: A review of current empirical findings and theoretical guidance. *Clinical Psychology Review, 30*(5), 496–516. doi:10.1016/j.cpr.2010.03.004.

Reiser, R. P., & Milne, D. L. (2014). A systematic review and reformulation of outcome evaluation in clinical supervision: Applying the fidelity framework. *Training and Education in Professional Psychology*, *8*(3), 149-157. doi:10.1037/tep0000031

Ringel, J. S., & Sturm, R. (2001). National estimates of mental health utilization and expenditures for children in 1998. *The Journal of Behavioral Health Services & Research*, *28*(3), 319-333. doi:10.1007/BF02287247

Roth, A. D., Pilling, S., & Turner, J. (2010). Therapist training and supervision in clinical trials: Implications for clinical practice. *Behavioural and Cognitive Psychotherapy*, *38*(3),

291-302. doi:10.1017/S1352465810000068

Schoenwald, S. K., Chapman, J. E., Kelleher, K., Hoagwood, K. E., Landsverk, J., Stevens, J., & ... Rolls-Reutz, J. (2008). A survey of the infrastructure for children's mental health services: Implications for the implementation of empirically supported treatments (ESTs). *Administration and Policy in Mental Health And Mental Health Services Research*, *35*(1-2), 84-97. doi:10.1007/s10488-007-0147-6

Schoenwald, S. K., Mehta, T. G., Frazier, S. L., & Shernoff, E. S. (2013). Clinical supervision in effectiveness and implementation research. *Clinical Psychology: Science and Practice*, *20*(1), 44-59. doi:10.1111/cpsp.12022

Schoenwald, S. K., Sheidow, A. J., & Chapman, J. E. (2009). Clinical supervision in treatment transport: Effects on adherence and outcomes. *Journal of Consulting and Clinical Psychology*, *77*(3), 410-421. doi:10.1037/a0013788

Scott, K. J., Ingram, K. M., Vitanza, S. A., & Smith, N. G. (2000). Training in supervision: A survey of current practices. The Counseling Psychologist, 28, 403–422. doi: 10.1177/0011000000283007

Sholomskas, D. E., Syracuse-Siewert, G., Rounsaville, B. J., Ball, S. A., Nuro, K. F., & Carroll, K. M. (2005). We Don't Train in Vain: A Dissemination Trial of Three Strategies of Training Clinicians in Cognitive-Behavioral Therapy. *Journal of Consulting and Clinical Psychology*, *73*(1), 106-115. doi:10.1037/0022-006X.73.1.106

Shuttle, T. (2009, August 25). Clinical supervision and 'money gouging' [Blog post]. Retrieved from http://blog.apastyle.org/apastyle/2010/11/how-to-cite-something-you-found-on-a-website-in-apa-style.html?_ga=1.225755548.744105971.1472692708.

Social Work License Requirements. (n.d.). SocialWorkLicensure.org: A state by state

licensure guide. Retrieved from http://www.socialworklicensure.org/articles/social-work-license-requirements.html.

Southam-Gerow, M. A., Weisz, J. R., Chu, B. C., McLeod, B. D., Gordis, E. B., & Connor-Smith, J. K. (2010). Does cognitive behavioral therapy for youth anxiety outperform usual care in community clinics? An initial effectiveness test. *Journal of the American Academy of Child and Adolescent Psychiatry, 49*(10), 1043–1052. doi:10.1016/j.jaac.2010.06.009.

Storm, C. L., Todd, T. C., Sprenkle, D. H., & Morgan, M. M. (2001). Gaps between MFT supervision assumptions and common practice: Suggested best practices. *Journal of Marital And Family Therapy*, *27*(2), 227-239. doi:10.1111/j.1752-0606.2001.tb01159.x

Texas State Board of Examiners of Marriage and Family Therapists apply for a new license – requirements. (n.d.). Texas Department of State Health Services. Retrieved from http://www.dshs.texas.gov/mft/mft_apply.shtm.

Vallance, K. (2004). Exploring counsellor perceptions of the impact of counselling supervision on clients. *British Journal of Guidance & Counselling*, *32*(4), 559-574. doi:10.1080/03069880412331303330

Warren, J. S., Nelson, P. L., & Burlingame, G. M. (2009). Identifying youth at risk for treatment failure in outpatient community mental health services. *Journal of Child And Family Studies*, *18*(6), 690-701. doi:10.1007/s10826-009-9275-9

Watkins, C. J. (2011). Does psychotherapy supervision contribute to patient outcomes? Considering thirty years of research. *The Clinical Supervisor*, *30*(2), 235-256. doi:10.1080/07325223.2011.619417

Watkins, C. J. (2014). Psychotherapy supervision developments and innovations for the

new millennium: Contributions from the cutting edge. *American Journal of Psychotherapy*, *68*(2), 141-149.

Weisz, J. R., & Gray, J. S. (2008). Evidence-based psychotherapy for children and adolescents: Data from the present and a model for the future. *Child and Adolescent Mental Health*, *13*(2), 54-65. doi:10.1111/j.1475-3588.2007.00475.x

Weisz, J. R., Jensen-Doss, A., & Hawley, K. M. (2006). Evidence-based youth psychotherapies versus usual clinical care: A meta-analysis of direct comparisons. *American Psychologist*, *61*(7), 671-689. doi:10.1037/0003-066X.61.7.671

Weisz, J. R., Southam-Gerow, M. A., Gordis, E. B., Connor-Smith, J. K., Chu, B. C., Langer, D. A., & ... Weiss, B. (2009). Cognitive–behavioral therapy versus usual clinical care for youth depression: An initial test of transportability to community clinics and clinicians. *Journal of Consulting and Clinical Psychology*, *77*(3), 383-396. doi:10.1037/a0013877

Wheeler, S., & Richards, K. (2007). The impact of clinical supervision on counsellors and therapists, their practice and their clients. A systematic review of the literature. *Counselling and Psychotherapy Research*, *7*(1), 54-65. doi:10.1080/14733140601185